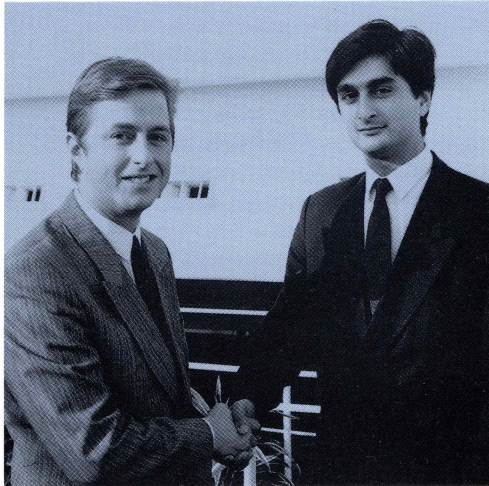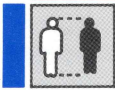# *X.tra*

X.desktop fronts Office Software Automation

Anil Malhotra of IXI (right) and Graeme Youngs, of Uniplex (left), formalise the joint technology agreement.

Uniplex, the leading supplier of integrated office automation software, is working with IXI to accelerate the adoption of the X Window System. Through a joint technology agreement, the two companies are working together to

OSF User Environment

At the end of December, the Open Software Foundation (OSF) announced which technologies will form the user environment component, called OSF/Motif, of its open software environment. As OSF/Motif technologies are based on the X Window System, this was a further stimulus for the move to X based software and systems.

OSF/Motif comprises DEC's toolkit Application Program Interface (API), includes many features of the Hewlett-Packard toolkit; and exhibits Presentation Manager behaviour and 3D appearance as provided by the joint HP/Microsoft submission. The style guide which specifies the appearance and behaviour of these technologies from the user's perspective will be based on the Hewlett-Packard window manager with additional features from the

integrate Uniplex software with **X.desktop**, IXI's graphical desktop manager. The Uniplex product will be enhanced to operate effectively in the multi-windowed, mouse and icon environment provided by X Windows and **X.desktop**.

"It is clear that X Windows is gaining significant momentum in the marketplace", said Graeme Youngs, Manager of Product Marketing for Uniplex. "We've chosen to work with IXI because they have emerged as one of the leading developers and consultants in X Windows products."

The **X.desktop** graphical shell gives Uniplex Business Software an easy to use, icon-based user interface from which the word processor or database programs of Uniplex can be invoked along with any other X applications. **X.desktop** enables users to organise their working environment quickly and efficiently through its visual file management facilities.

"We are very pleased to be working with Uniplex to bring a major product to the X Windows market", said Anil Malhotra, Sales & Marketing Director of IXI. "This is another major vote of confidence in X as the software standard of the future".

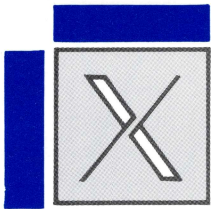IXI's **X.desktop** and the Uniplex range of software are examples of X/Open conformant applications (see back page).

Contents

Uniforum

IXI's **X.desktop** product fits the theme of this year's show – Turning Technology into Solutions. It's solutions that users want, and **X.desktop** harnesses the power and flexibility of UNIX systems to provide usable systems to the non-technical user.

Uniforum is the first public showing of **X.desktop** by many of IXI's licensees. **X.desktop** should be in action on the NCR, SONY, Tektronix, Locus, Interfirm, BiiN, NCD, Uniplex, UniPress, Motorola and IXI booths. Anyone who's running X on their booth will be able to access **X.desktop** over the show Ethernet network from any of these booths.

Digital window manager and a merged Hewlett-Packard and Digital toolkit.

OSF has recognised that PC users will inevitably move from DOS to OS/2 and Presentation Manager (PM), so the selection of PM as a basis for the behaviour of OSF/Motif will provide computer users with a familiar user interface across a broad range of computers, from stand-alone personal computers to high-end graphics workstations and powerful mainframes.
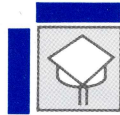
Graphical Shell

IXI's **X.desktop** technology was presented to OSF's final review meeting in December as the "desktop" style graphical shell component. However, OSF decided not to adopt a graphical shell because "there was significant member controversy over the appropriateness of including this kind of functionality in the core OSF offering".

OSF/Motif comprises development tools required to build a user interface whereas **X.desktop** is an X application that can be tailored to the OSF/Motif (or indeed any other) style guide. Some OSF members have already licensed **X.desktop** directly from IXI, and were no doubt very pleased to learn that their investment will be compatible with the direction taken by OSF.

A graphical shell is a vital part of the user interface for non-technical users. IXI will be submitting **X.desktop** for inclusion in the OSF Catalog Technology Program.

OPEN LOOK

IXI's goal is that **X.desktop** will become the standard "desktop style" graphical interface for all UNIX based computer systems. Analysts in the industry foresee that two user interface styles will predominate in the UNIX world in the short term – OSF/Motif and AT&T OPEN LOOK. IXI is now starting work on tailoring **X.desktop** to conform to both the OSF/Motif and OPEN LOOK styles.

IXI Training

IXI's X Window System training courses have become increasingly popular. Now, as more companies are adopting X all over Europe, IXI is adding two new courses to its regular training program.

Selling X Effectively (SXE) is an intensive 4 hour seminar which introduces Sales, Support, and Marketing personnel to X. It explains the issues involved in selling and supporting X based systems, and focuses on the opportunities for meeting customer needs with an X based solution.

The SXE seminar is presented on an in-house basis, and includes a section tailored to the client's particular offerings and position in the marketplace. Companies such as Acorn, Apollo, AT&T, and British Telecom have already benefitted from specific X training from IXI.

Understanding OSF/Motif is a two and a half day course for software developers planning to use the OSF/Motif User Environment. Reviewing the concepts of X, then covering the Motif Window Manager, Style Guide, Toolkit, and User Interface Language, the course provides a solid foundation for application software development.

This course is scheduled for introduction in May 1989, enabling attendees of the first courses to start work with Motif as soon as it is generally released in mid 1989.
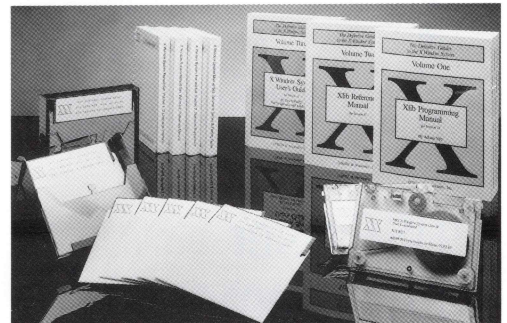
Contact Karen Roberts at IXI for a training brochure and details of IXI's other training courses (the X Programmer's Workshop and X Stategic Overview) on 0223 462131.
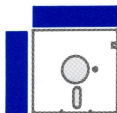
IXI Books and Manuals

A complete range of X documentation is available in Europe through IXI for both X users and software developers. The latest addition to this range is the O'Reilly X Window System User's Guide, the third volume in the authoritative series of X manuals.

The X User Guide is available now, price £25.00 (add £5.00 for shipping to Europe).

The MIT X Window System Manual Set (4 volumes) and the O'Reilly X11 Programming Manual (2 volumes) are essential reference and tutorial works for anybody using or evaluating the X Window System.
IXI supplies the MIT X Window System Manual Set for £60.00 and the O'Reilly tutorials for £55.00 (add £15.00 for shipping to Europe).

X11 Source Code in Europe

As a fast and convenient source of the complete X Window System source code, IXI supplies X11 Release 3 (the latest release from MIT) on a 0.25″ cartridge tape or 29 IBM PC-AT format floppies. This release is particularly important because the toolkit intrinsics have now been standardised.

The 105Mb Release 3 contains X servers for DEC, Sun, HP, Apple Mac II, IBM PC-RT and Apollo systems. It also includes a whole range of new fonts, a vastly expanded collection of user contributed client programs in source code form, and machine readable documentation for on-line access. IXI has enhanced the standard release to include a compress/expand utility and to allow it to be loaded onto System V as well as Berkeley UNIX Hosts.

X11 Source Code on 0.25″ cartridge tape	£225.00 (plus VAT)
IBM PC-AT format floppies (tar files)	£275.00 (plus VAT)

Surveying X Servers

*Ray Anderson, Managing Director
IXI Limited, Cambridge, England*

IXI has often been asked to advise on the performance and reliability of different X servers. Ray Anderson of IXI Ltd summarises some of his findings.

Users of Sun, Apollo, and IBM-RT workstations are probably best advised to take the standard MIT X11 Release 3 servers from the MIT tape, add the latest fixes and use these for most work. They are more reliable than their Release 2 counterparts and have the latest features such as "save-unders".

There are a few "productised" servers about (for the Sun in particular). However, many of these are based on X11.2, and don't seem to offer much extra performance or reliability over the Release 3 servers. Servers provided by HP, SONY, and Tektronix for their workstations are all of high quality and very good performance.

For 386 based workstations there is already a choice of X servers. The AT&T X server for their 386 boxes is quite fast, and seems reliable and well tested. For other 386 systems there are two main options, the Locus Xsight 1.1 server and the GSS X/386 1.1 server. Both are available on Interactive 386/ix though Xsight will also be available on SCO Xenix very soon.

The GSS server has the advantage of supporting high resolution "DGIS" compatible displays, but a limited choice of standard PC type displays. Locus Xsight supports a huge range of displays, including several "plasma" displays on luggables. We have seen steady improvements in the speed of both these servers and expect improvements to continue. Both are suitable for general X software development.

NCR is latest X.desktop licensee

NCR Corporation, a member of X/Open and Unix International, has selected IXI's **X.desktop** as the graphical front-end for its newly launched Towerview products which use the X Window System. NCR's choice is a major endorsement of **X.desktop** as the premier UNIX desktop.

Users sitting at a Towerview will use **X.desktop** to launch, manage and manoeuvre between applications running on an NCR Tower or elsewhere on a network. **X.desktop** has the capability to operate in the multi-user environment provided by the NCR Towerview system, providing a straightforward upgrade path for users of "dumb" terminals.

"NCR's Towerview products provide users with a windowed graphical environment, giving more flexibility than traditional terminals" said Tom Rampenthal, Towerview Product Manager. "We chose **X.desktop** as the graphical front-end that would enable our users to exploit the power and flexibility of our new systems."
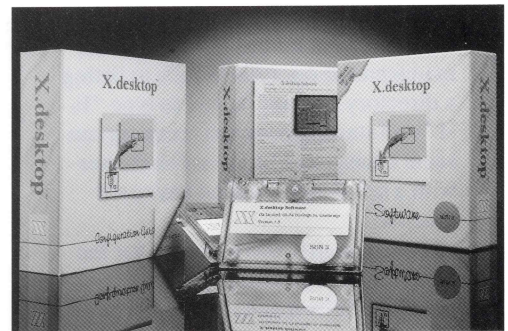
NCR's move to provide a windowing capability to their users, with an easy to use "desktop" interface is good news for IXI. It means that the X Window System and **X.desktop** will get a much greater exposure to non-technical users in the commercial world than ever before. Our plan is to continue to refine and develop **X.desktop** to meet user needs, and to monitor their comments carefully.

Off the shelf X.desktop

The **X.desktop** system is now available in "shrink-wrap" form to users of a range of workstations and host systems. This move is in response to strong demand from users of UNIX workstations who can not yet get **X.desktop** through their system vendor, or who need to provide **X.desktop** across a wide range of systems "in-house" to provide a common interface to their non-technical users.

Initial availability will be on SUN, Hewlett-Packard and Apollo workstations, with several other formats currently being prepared. As an X client, **X.desktop** can be installed on the appropriate host system or workstation, and then used with an X server of the user's choice.

X.desktop appeals to applications users and computer professionals alike who benefit from **X.desktop's** visual working environment. Novice users can manage their work easily without having to interact with the operating system but Unix professionals can still access the full range of UNIX facilities.

The shrink-wrapped **X.desktop** contains a pre-configured desktop so the user can begin working with it immediately. The appearance and behaviour of the desktop can be changed or enhanced at any stage according to the user's needs without any "programming" by simply editing the "rule files".

The documentation comprises a step-by-step User's Guide and a detailed Configuration Guide. All registered users will receive up to date information and support.
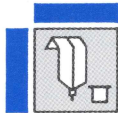
Contact the Sales Department at IXI Corporate Headquarters on +44 223 462131 for further details.
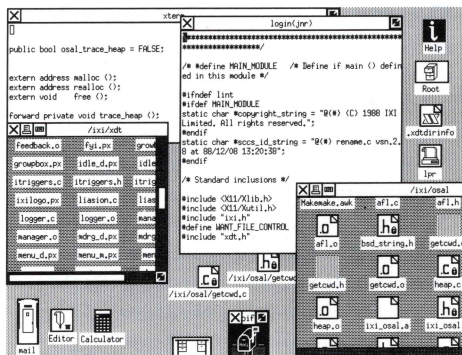
Configuring X.desktop

As X starts to penetrate further into the marketplace, **X.desktop** is being used in an ever widening number of applications and business areas.

It is easy to identify with the non-technical user who wants to have a simple desktop style presentation of their files, documents, and electronic mail system. **X.desktop** is admirably suited for this, automatically generating appropriate actions for clicks on the different file types on the system, and helping the user carry out simple housekeeping tasks such as copying, renaming, deleting, and archiving.

However, we come across strong resistance to the idea of a graphical user interface from UNIX power users, especially those who are used to a powerful textual shell such as the "Korn" shell or "Warwick" shell. The idea of using a mouse to carry out file management operations such as listing a directory without having to type "1s -1" and starting programs running can seem clumsy to a hardened shell user with a set of hand crafted keyboard macros.

Although it was intended for the non-technical, **X.desktop's** configurability means that it can be extremely useful for even the most avid shell hacker. This has been proven in IXI's own technical team where **X.desktop** has become an essential part of the software development environment.

The UNIX source management systems can be handled very effectively in a visual form – **X.desktop** can be configured to extract files if necessary before editing them, and to put them back into the system automatically when they are completed.

Spinning off compilations or "make" activity with a click of the mouse, printing groups of files, archiving, compressing, or manipulating data by just dropping icons on the appropriate tools, or even just reading mail which has arrived as an icon on the desktop – all these activities become second nature, and complementary to the use of a powerful command-line shell on a programmer's workstation.

Since **X.desktop** consumes almost no resources or screen space when it is waiting for instructions, it should be run at all times. The virtues of having "instant" access to programs, files, and directories soon make themselves apparent.
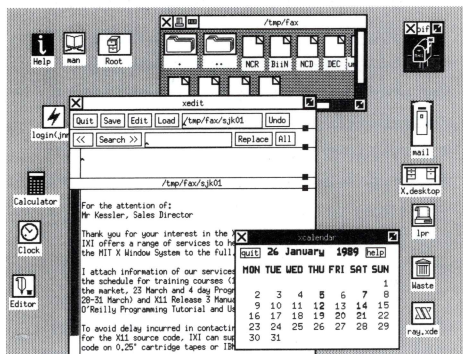
Laurie Riedman, President of Riedman Communications

Cambridge (England) based IXI is now operating from offices in its twin city of Cambridge, Massachusetts to provide an enhanced support service to OEM customers.

As a further consolidation of its US activities, which now account for more than half the company's revenues, IXI has appointed Riedman Communications for the vital role of marketing communications within America. Riedman Communications has a wealth of experience in the computer industry and will greatly increase IXI's market presence through a combination of public relations and analysts briefings.

Laurie Riedman, President, has experience of both consultancy work whilst at the highly respected PR agency, Miller Communications, and also of in-house PR at IBM, Poughkeepsie, New York.

Journalists and analysts should contact Riedman Communications on

Tel: (617) 246 0587
Fax: (617) 245 4602

IXI Data Panel

X/Open Conformance

In January 1989, X/Open announced the availability of the first software products conforming to the X/Open portability guide. IXI's **X.desktop** was one of these products, and is now permitted to bear the X/Open "brand" mark.

The X/Open branding is a visible indicator of **X.desktop's** conformance to the detailed and comprehensive standards that ensure truly open systems. During the development of **X.desktop**, IXI engineers ensured that the design met all applicable international standards, enabling the product to meet the stringent requirements of X/Open very soon after they were announced.

IXI's conformance to standards for its user interface products has opened the way for collaboration with other application suppliers. Uniplex, a supplier of office automation software and another company that has achieved X/Open conformance, is working with IXI to integrate **X.desktop** into its products (see front page).